

Pioneer *sound.vision.soul*

2003

PureVision™ Plasma Displays

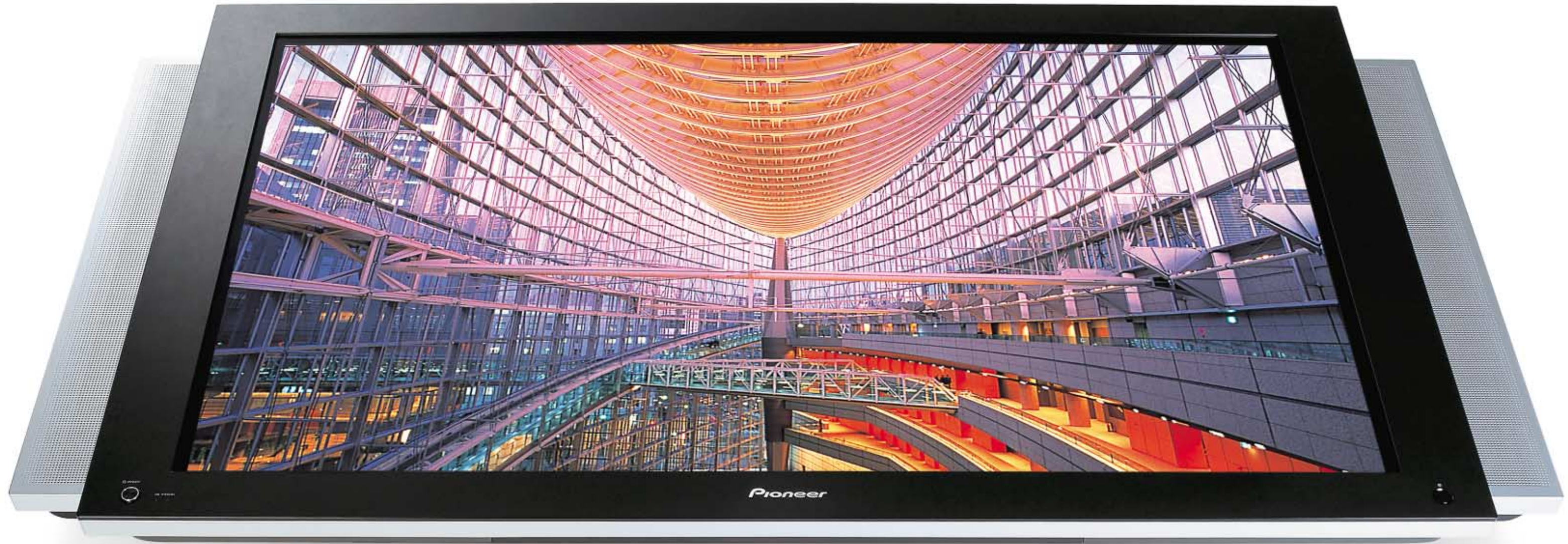


Going where television has never gone before.





1,073,741,824 true colors.
One true revelation.



There are many brands of plasma displays, but only a few actual manufacturers. At the top of this short list, Pioneer is a true innovator at the forefront of plasma development.

Our latest breakthrough is Pure Drive, an exclusive all-digital drive that pushes the limits of high-performance plasma circuitry. Pioneer's patented technologies with optical glass and plasma cells will shape plasma panel design for years to come.

To these developments, add stylish design and exceptional ease of use—and the experience is pure entertainment pleasure.

Envision excellence. Then surpass it.

PDP-5040HD

50" 16:9 High-Definition Plasma Television

- WXGA Resolution (1,280 x 768 progressive)
- Pure Drive Full Digital Image Processing
- ACE II (Advanced Continuous Emission II)
- Advanced PureCinema with 3-3 Pulldown
- ATSC/NTSC tuners
- Two HDMI Inputs

Dimensions: 50" x 29" x 3-7/8"
Weight: 83 lbs. 13 oz.

Media Receiver, Side Speakers and Table-top Stand are included.



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PDP-4340HD

43" 16:9 High-Definition Plasma Television

- XGA Resolution (1,024 x 768 progressive)
- Pure Drive Full Digital Image Processing
- ACE II (Advanced Continuous Emission II)
- Advanced PureCinema with 3-3 Pulldown
- ATSC/NTSC tuners
- Two HDMI Inputs

Dimensions: 44-1/8" x 25-11/16" x 3-7/8"
Weight: 67 lbs. 4 oz.

Media Receiver, Side Speakers and Table-top Stand are included.



TV picture simulated.

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PDP-5040HD/PDP-4030HD



- PureVision and PureCinema are registered trademarks of Pioneer Corporation.
- **High-Definition Television (HDTV):** HDTV refers to a complete product/system with the following minimum performance attributes: *Receiver: Receives ATSC terrestrial digital transmissions and decodes all ATSC Table 3 video formats *Display Scanning Format: Has active vertical scanning lines of 720 progressive (720p), 1080 interlaced (1080i) or higher *Aspect Ratio: Capable of displaying a 16:9 image *Audio: Receives and reproduces, and/or outputs Dolby Digital audio" Consumer Electronics Association, August 2000
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- SRS WOW, SRS and (o) symbol are trademarks of SRS Labs, Inc.

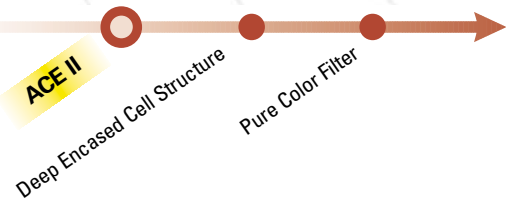
PureVision, Pioneer style.

PureVision plasma TVs are the culmination of Pioneer's experience in designing and manufacturing plasma panels, receivers, and accessories. Each new development contributes to a superlative viewing experience, every single time you turn the unit on. The proof is right there on the screen.



PureVision Plasma Display
PURE DRIVE
Image Processing Technology

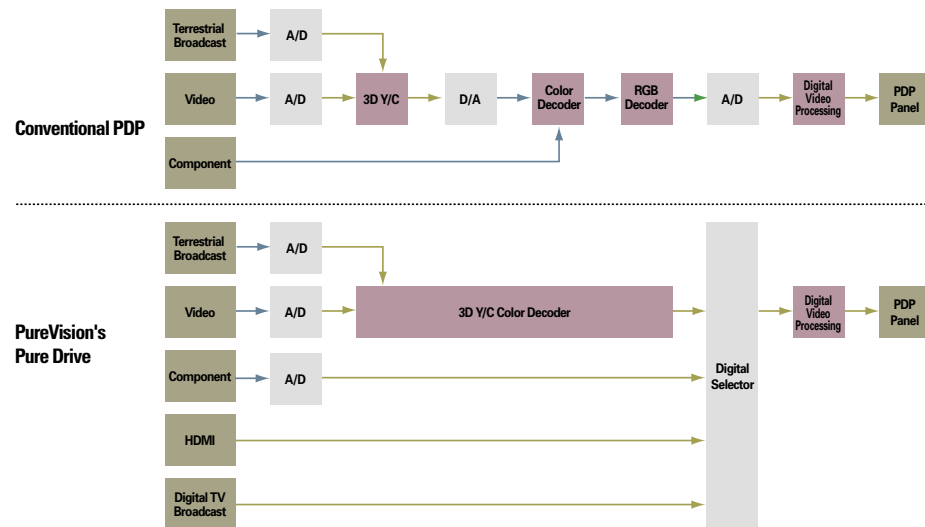
- Digital Y/C Separation Circuit
- Digital Color Decoder
- Digital High-Quality Image Processing
- Advanced Pure Cinema
- High-Performance Resize and Multiple Image Processing



PURE DRIVE

The heart of Pioneer's new digital circuitry

Pure Drive keeps video signals entirely in a digital domain, vs. the conventional process of converting signals back and forth between analog and digital. This lossless, all-digital process allows far greater control of the signal maintaining all of its original quality.

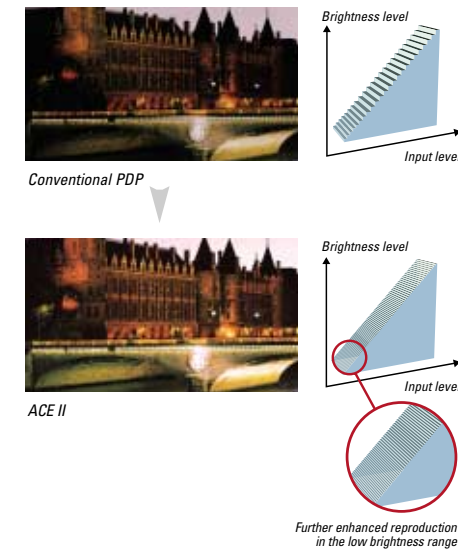


PURE DRIVE

1.07 billion colors on display

Pure Drive technology is the key to how processed images are able to look clear and natural on a plasma display panel. A perfect example: Pioneer's ACE II (Advanced Continuous Emission II) processes red, green, and blue primary color elements (RGB) to reproduce an astonishing 1.07 billion colors. Other displays just can't match the smoothness and subtlety of color on Pioneer PDPs. But that's not all. ACE II produces an amazing 1,024 grayscale steps, for vastly improved rendering of images in darker scenes, and virtually eliminates quantization. Bottom line: for the most accurate color reproduction, the choice is clear.

More Gray Shades in the Low Brightness Range



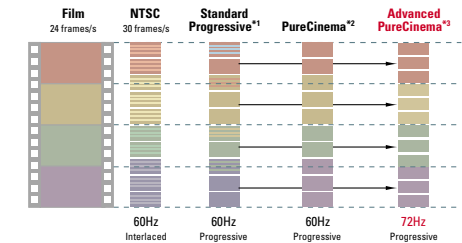
Advanced PureCinema with 3-3 pulldown

Film doesn't translate directly to a standard that a TV can process; to display a movie, 6 frames per second (fps) must be added to the film's original 24 fps to equal 30 fps, the standard that TV uses. Called 3-2 Pulldown, this interpolation process improved NTSC reproduction of film-based material, but generates uneven motion known as judder. Pioneer solved the issue by developing an exclusive IC that enables 3-3 Pulldown, which synchronizes perfectly the frame rate of film and eliminates the need for interpolations. Now, film-based material on DVD, videotape, and regular TV will match the smooth, natural reproduction of film.

Digital processing, absolute fidelity

Pure Drive circuitry unifies and digitally processes all signals right up to the driver, from the instant they're input into the receiver until they're displayed as images. Also, each block in the image processing circuit is directly connected using the shortest signal path, to minimize image-degrading noise and signal deterioration. This adds up to superior retention of signal quality, from HDTV, PC, or other signal sources.

Advanced PureCinema



*1 Standard Progressive: Mixed different frame in some portion
*2 PureCinema: Mixed completely same frame only
*3 Advanced PureCinema: Up the refresh rate to 72Hz perfect synchronize frame arrangement with original films

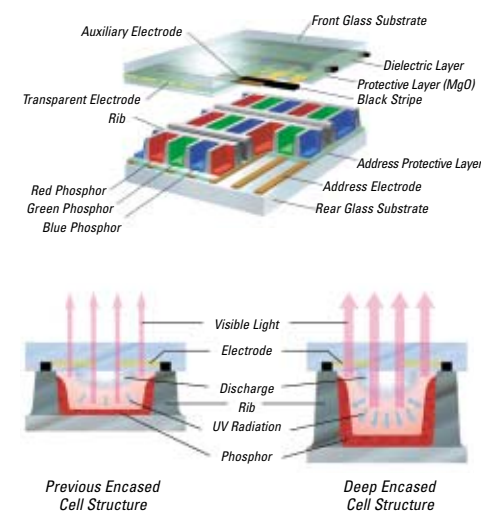
ACE II virtually eliminates quantization



Deep Encased Cell Structure: true brilliance

Pioneer's patented Deep Encased Cell Structure has been upgraded with new green and blue phosphor elements, delivering unprecedented contrast and brightness: 1,100 cd/m² for the 43-inch and 1,000 cd/m² for the 50-inch panel. White reproduction is improved for more subtle nuance, while clarity is boosted for more natural, precise rendering of characters and images.

Pioneer Deep Encased Cell Structure



Previous Encased Cell Structure Deep Encased Cell Structure

Visible Light Electrode Discharge Rib UV Radiation Phosphor

Conventional PDP ACE II

Multifaceted picture perfection.

MPEG Noise Reduction smooths out images

For smoother-looking pictures, even when you're viewing low-light scenes, MPEG Noise Reduction cuts "mosquito noise" caused by MPEG video compression used in DVD and HDTV sources.

Digital Noise Reduction for a cleaner picture

Special high-luminance cyclic Digital Noise Reduction circuitry reduces random digital noise, including color noise and inconsistency (especially seen in dark image areas) that arise in the signal reproduction process of terrestrial broadcasts, DVDs, and HD.

10-Bit 3D Y/C Separation ends dot crawl

Powered by Pure Drive, 10-Bit 3D Y/C Separation effectively keeps luminance (Y) and chrominance (C) signals separate, reducing the annoying video noise called "dot crawl" and improving the rendering of contoured objects.

10-Bit Digital Color Decoder cuts color noise

Color noise is another form of video interference—noticeable speckled imperfections seen within solid colors on your screen. 10-bit Digital Color Decoder reduces color noise and provides better frequency response, for purer, cleaner colors.

HD Converter sharpens up images

Interlaced signals of terrestrial broadcasts, as well as DVD and PC video sources, are up-converted into progressive signals, for optimal viewing on the PDP-5040HD (1,280 x 768-dot high-resolution) and the PDP-4340HD (1,024 x 768-dot high-resolution). Now with 84 detection points on the screen, HD Converter offers sharper, more natural images free of the jagged edges and distortion seen on displays using conventional converters.

Natural Enhancer for sharper detail

Natural Enhancer is an industry first technology that takes contour image correction to the next level. On any source, analog or digital, Pure Drive-powered Natural Enhancer cleans up those wavy Moire ("moray") patterns and enhances the contrast at the edges of images—rendering a clean, detailed picture.

Dynamic Range Expander boosts contrast

Fuller use of video signal spectrum capacity expands dynamic range, for blacker blacks, whiter whites, and outstanding overall contrast. You can select among high, medium, and low settings for best results.

Digital CTI keeps colors honest

When two color images intersect on-screen, the usual result is a dithered pattern and a muddy combination of colors. For this reason, Digital Color Transient Improvement (CTI) is used to maintain true color fidelity and color resolution.

MPEG Digital Noise Reduction



OFF



ON

Digital Noise Reduction



OFF



ON

Dynamic HD Converter

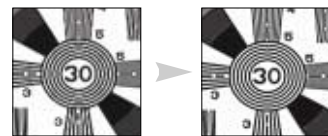


Conventional PDP

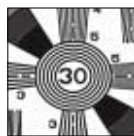


Dynamic HD Converter

Natural Enhancer



Conventional PDP



Pioneer's Natural Enhancer

Dynamic Range Expander



OFF



ON

Integrated ATSC Terrestrial DTV Tuner

A built-in next-generation terrestrial ATSC (Advanced Television Systems Committee-compatible) tuner features DTV (digital TV) program channel selection function to check or search for such programs. Connect the unit's IEEE1394 (FireWire/i.LINK) terminal to a D-VHS recorder to record DTV programs. DTV CC (closed caption) is also available.

Multi-Window Display: a great view x2

This is for those times when you want to watch two shows at the same time. Multi-Window Display takes dual-material viewing to new levels, letting you display any combination of HDTV, NTSC—even computer—either as twin images (50/50 split screen) or as Picture in Picture. Now, you can watch pro football on HDTV alongside fantasy football on your PC. Or a right-corner freeze frame of a golf swing alongside the telecast it came from. Or two music specials...OK, you get the picture.

Multi-Window Display



2 split screens (with PC)



Picture in picture

From living room to living theater.

Three surround modes mix things up

To expand your sound options, Pioneer plasma TVs feature three surround modes: SRS, for dynamic 3-D surround throughout an expansive listening area; TRU BASS for surprisingly big, natural bass sound; and FOCUS, which enhances the surround effect and shifts the sound field upward—ideal if the detachable speakers are installed horizontally underneath the plasma TV.

Slim speakers, big sound

Despite their compact size—and stylish design—the PDPs' detachable, two-way bass-reflex speakers deliver maximum sound quality, imaging clarity, and sound field performance. Each speaker features an oval full-range speaker and a tweeter with a neodymium magnet.

Speakers that change locations

The PDPs' detachable speakers can be mounted in two locations: either back-set slightly on the panel's sides, or underneath it, which is especially convenient when you place the panel in a corner. This mounting flexibility also allows you to change the panel's look periodically.

All the right connections



PDP connections include i.LINK (IEEE 1394) terminals, Pioneer SR+ inputs, optical digital audio outputs, and two high-bandwidth HDMI inputs. You'll be ready for full reception of audio and video signals in current formats and in upcoming generations as well.

Versatile Media Receiver

The PDPs' powerful, easy-to-use Media Receiver incorporates a terrestrial digital TV (DTV) tuner and provides three sets of component inputs, including one set on the front panel. Only 11-11/16" deep, it can be installed vertically (using its supplied stand) or horizontally.

Easy on-screen GUI HOME MENU

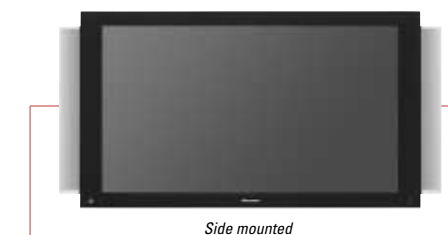
A new graphical user interface (GUI) makes it easy to control the panels' settings. Starting with the HOME MENU button on the remote control, you'll quickly master the units' functions with the intuitive on-screen GUI.

SR+ input for amplifier control

Connect a PureVision plasma TV's SR+ terminal to a separately available Pioneer AV Receiver*, and the display automatically selects the receiver's signal source. This gives you on-screen control of the receiver's volume level, surround mode, and other functions.

*SR+ compatible Pioneer receivers only.

Speaker Mounting



Side mounted



Under mounted

Vertically installed Media Receiver



New GUI



New GUI screen

Accessories

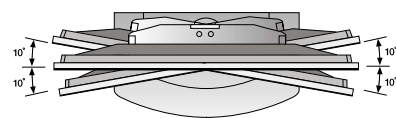


Included Accessories (for PDP-5040HD/ PDP-4340HD)

Swivel Table-top Stand



- Swivels 20 degrees to the right or left.
- 684(W) x 351(H) x 390(D) mm/ 14.0kg
- 26-15/16(W) x 13-13/16(H) x 15-3/8 inches/ 30 lbs. 14 oz.



Optional Accessories (for PDP-5040HD/ PDP-4340HD)

PDK-FS03

Solid Floor Stand



- 701(W) x 803(H) x 476(D without shelf), 567(D with shelf) mm/ 20.0kg
- 27-5/8(W) x 31-5/8(H) x 18-3/4 (D without (D with shelf) inches/ 44 lbs.



Installation example for PDP-5040HD



Media Receiver can be mounted vertically onto back of this stand.

PFS-1011

Floating Floor Stand with Swivel



The monitor swings 30 degrees to the right or left.

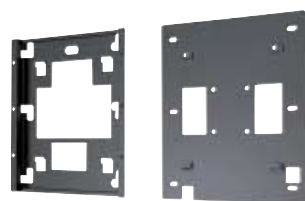
PWM-1011

Slim Wall Bracket



PDWB-5003

Wall Bracket



PWM-503

Angled Wall Bracket



PDA-H03

Extension Cable

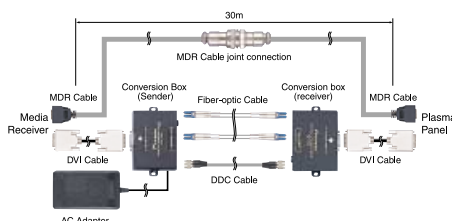
- 10-meter coaxial extension cable
- Weight: 3 lbs. 12 oz./ 1.7kg



PDA-H04

Fiber-optic Extension System

- 30-meter fiber-optic extension cable
- Weight: 14 lbs. 5 oz./ 6.5kg



*The PWM-1011, PDWB-5003, PWM-503 and PFS-1011 are offered for sale only in the U.S. market. Pioneer cannot accept responsibility in the event that they are used in other regions.

*The PWM-1011, PDWB-5003, PWM-503 and PFS-1011 have been produced by Progressive Marketing Products, Inc. If you need further information please call 1-800-368-9700 or access to <http://www.pmpi.com>.

Specifications/Dimensions/Terminals



PDP-5040HD/ PDP-4340HD

Display Panel:	
Screen Size	50 inches/ 43 inches diagonally
Aspect Ratio (Panel Only)	16 : 9
Number of Pixels	1,280 x 768/ 1,024 x 768
Brightness (White Peak, Panel Only)	1,000 cd/m ² / 1,100 cd/m ²
TV Color Format	3.58NTSC
Horizontal Scanning Frequencies	15.625 — 45.0kHz (Video)/24.8 — 68.7kHz (PC)
Vertical Scanning Frequencies	45.0 — 84.99/Hz
Video Features:	
Pixel Pitch	0.808mm (V) x 0.858mm (H)/ 0.698mm (V) x 0.930mm (H)
Protection Filter	Radiation/R Shielded, Anti-Reflection, Pure Color Filter
Material of Protection Filter	Glass
Wide Viewing Angle (Horizontal/ Vertical)	More than 160°/ 160°
Driving Method	AC
HD Converter	Yes
PureCinema	Yes (Std. 60Hz/Adv. 72Hz)
3-Dimensional Y/C separation	Yes (10-bit)
Color Temperature Control (Pre-Setting)	Yes (3 Steps) (High/Mid/Low)
MPEG Noise Reduction	Yes (ON/OFF)
Digital Noise Reduction	Yes (OFF/High/Mid/Low)
Natural Enhancer	Yes
Natural Resize	Yes
Digital CTI (Color Transient Improver)	Yes (ON/OFF)
Digital Color Decoder	Yes (10-bit)
PC Compatibility*	Yes (VGA, SVGA, XGA, WXGA)
Audio Features:	
Power Output	13W + 13W
External Speaker Output	2 Way
Tone & L/R Balance Control	Yes
Surround	SRS* (Sound Retrieval System)/FOCUS/Tru Bass
Bass Boost (Loudness)	Tru Bass
Tuner Features:	
Digital Terrestrial (ATSC Tuner)	Yes
Reception System	American TV Standard NTSC System
Reception Channels	VHF; Ch 2 — Ch 13, UHF; Ch 14 — Ch 69 CATV (Standard, IRC or HRC/Ch 1 — Ch 125)
Stereo/Multi-Audio System	MTS
Closed Captioning	Yes
V-Chip (Parental Guidance System)	Yes
Canadian Rating Systems	Yes
Conveniences:	
Selectable Screen Modes	Yes (4:3, FULL, ZOOM, CINEMA, WIDE)
On-Screen Display	English/French/Spanish/Korean
Remote Control Unit	Illuminated Preset/Learning
Auto Tuner Preset	Yes
Channel Return	Yes
Picture Mode	5 Modes (Standard/Dynamic/Movie/Game/User)
Still Picture	Yes
Versatile Screen	Yes
Dual Analog Tuner	Yes
Plug & Play	Yes (DDC1 & 2B)
Auto Power Off (No Signal)	Yes
Auto Power Off (No Operation)	Yes
Power Management (for PC)	Yes
Power Saving Setting	Yes
Sleep Timer	Yes
Terminals:	
Antenna Input	VHF/UHF x 3 (75 ohm Unbalanced F-type Connector)
Antenna Output	VHF/UHF x 2 (75 ohm Unbalanced F-type Connector)
A/V Input (Front)	x 1 (RCA pin)
A/V Input (Rear)	x 3 (RCA pin)
Monitor Output	x 1
S-Video Input (Front)	x 1
S-Video Input (Rear)	x 2
S-Video Output (Rear)	x 1
Component Input (Front)	x 1
Component Input (Rear)	x 2
D-Sub 15 Input (Front)	x 1 (for PC Input)
Digital Audio Output (Rear)	Yes (Optical)
i.LINK	2 Terminals
HDMI Input	2 (with HDCP)
SR In/Output	Yes (Out = SR+)
Miscellaneous:	
Power Requirements	AC120V
Power Consumption	407.5W/ 342.5W
Standby Power Consumption	0.6W (120V)
Plasma Part	
Dimensions (W x H x D) inches	50 x 29 x 3-7/8 inches/ 44-1/8 x 25-11/16 x 3-7/8 inches
Dimensions (W x H x D) mm	1,270 x 737 x 98mm/ 1,120 x 652 x 98mm
Weight (lbs.)	83 lbs. 13 oz./ 67 lbs. 4 oz.
Weight (kg)	38.0kg/ 30.5kg
Media Receiver Part (PDP-5040HD/ PDP-4340HD)	
Dimensions (W x H x D)	16-9/16 x 3-9/19 x 11-11/16 inches/420 x 90 x 297mm
Weight	12 lbs. 9 oz./5.7kg

* Displaying the same still images for long periods should be avoided as image shadowing or burn-in may occur.

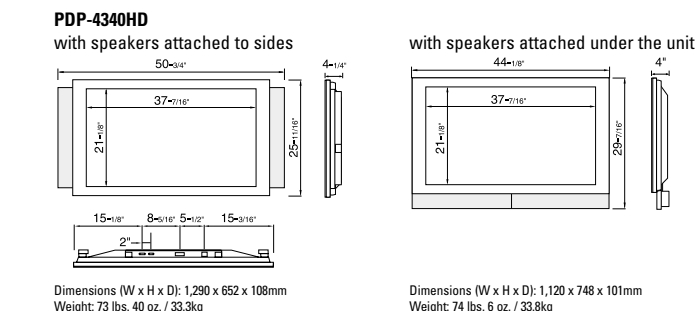
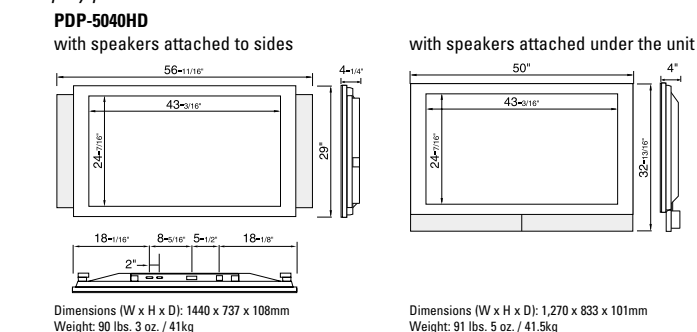
* SRS, TruBass and FOCUS are trademarks of SRS Labs, Inc.

Note: Specifications and design subject to modification without notice.

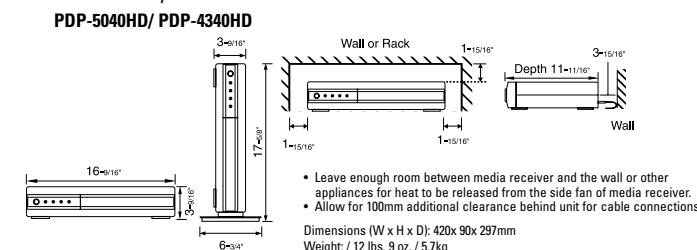
Dimensions

Display part

Unit: inches



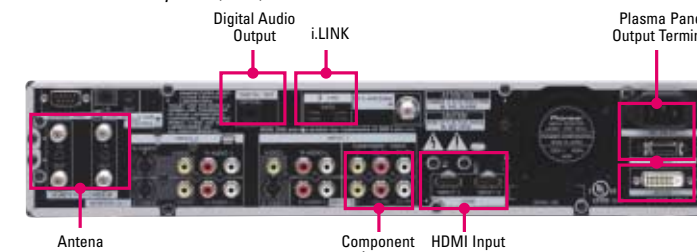
Media receiver part



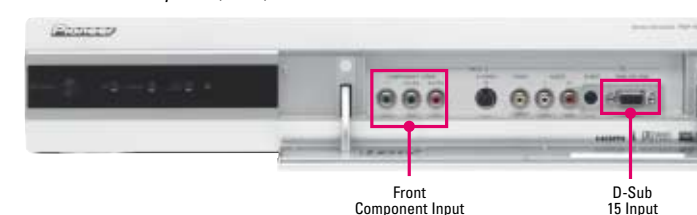
- Leave enough room between media receiver and the wall or other appliances for heat to be released from the side fan of media receiver.
 - Allow for 100mm additional clearance behind unit for cable connections.
- Dimensions (W x H x D): 420x 90x 297mm
Weight: / 12 lbs. 9 oz. / 5.7kg

Input/Output Terminals

Media Receiver panel (rear)



Media Receiver panel (front)



Pioneer
sound. vision. soul

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<http://www.pioneerelectronics.com/>

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03 PUREVISION PLASMA DISPLAYS PUSA FALL